

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1 (currently amended): A method for controlling a recloser for a three-phase electrical power line, comprising:

monitoring the three phases of the power line;
determining which of the three phases have an associated fault by detecting a fault in at least one of the three phases, starting a countdown timer associated with each faulted phase, and determining the faults still present after one of the associated countdown timers has expired;

opening only the phases on the power line that have the associated fault; and
if only one fault is determined, then monitoring the fault to determine if the fault evolves into another phase, and if so, opening only the at fault phases of the recloser.

Claim 2 (original): The method according to claim 1, wherein the fault occurs when a protection element on the recloser enters pickup.

Claim 3 (original): The method according to claim 1, wherein determining which of the three phases have an associated fault comprises comparing a line current through each of the three phases to a predetermined current, a fault occurring on one of the phases when the line current on the associated phase exceeds the predetermined current.

Claim 4 (canceled)

Claim 5 (currently amended): The method according to claim [[4]] 1, wherein the fault occurs when a protection element on the recloser enters pickup.

Claim 6 (original): The method according to claim 1, wherein opening the phases on the power line that have the associated fault comprises opening only one phase if only one fault is determined, the only one phase being associated with the fault, opening only two phases if only two faults are determined, the only two phases being associated with the two faults, and opening all three phases if three faults are determined.

Claim 7 (currently amended): A recloser control system for a three-phase electrical power line, comprising:

a recloser having three poles, each pole corresponding to an associated one of the three phases of the power line and being capable of opening or closing the associated phase of the power line; and

a recloser controller coupled to the recloser for controlling the setting of the poles depending on the line current appearing in the phases on the power line, one pole opening the associated phase of the power line if the line current on only the associated phase exceeds an associated predetermined current, two poles opening the two associated phases of the power line if the line current on only the two associated phases exceeds an associated predetermined current, and all poles opening all the associated phases of the power line if the line current on three phases exceeds the associated predetermined current, and if only one fault is present, then monitoring the fault to determine if the fault evolves into another phase, and if so, opening only the at fault phases of the recloser, wherein the recloser controller comprises a countdown timer for each faulted phase for determining whether a phase that has entered a pickup state should be tripped.

Claim 8 (original): The recloser control system according to claim 7, wherein the recloser controller monitors the three phases of the power line and determines a number of phases in which the line current exceeds the associated predetermined current, wherein controlling the setting of the poles is responsive to the determined number of phases in which the line current exceeds the associated predetermined current.

Claim 9 (canceled)

Claim 10 (currently amended): A computer-readable medium having computer-executable instructions for performing steps comprising:

monitoring the three phases of the power line;

determining which of the three phases have an associated fault by detecting a fault in at least one of the three phases, starting a countdown timer associated with each faulted phase, and determining the faults still present after one of the associated countdown timers has expired;

opening only the phases on the power line that have the associated fault; and
if only one fault is determined, then monitoring the fault to determine if the fault evolves into another phase, and if so, opening only the at fault phases of the recloser.

Claim 11 (original): The computer-readable medium according to claim 10, wherein determining which of the three phases have an associated fault comprises comparing a line current through each of the three phases to a predetermined current, a fault occurring on one of the phases when the line current on the associated phase exceeds the predetermined current.

Claim 12 (canceled)

Claim 13 (original): The computer-readable medium according to claim 10, wherein opening the phases on the power line that have the associated fault comprises opening only one phase if only one fault is determined, the only one phase being associated with the fault, opening

only two phases if only two faults are determined, the only two phases being associated with the two faults, and opening all three phases if three faults are determined.

Claim 14 (previously presented): The method according to claim 1, further comprising controlling the recloser to at least one of trip, reclose, and lockout responsive to the fault being detected on one phase independently, two phases sequentially, or three phases simultaneously.

Claim 15 (previously presented): The recloser control system according to claim 7, wherein the recloser controller controls the recloser to at least one of trip, reclose, and lockout responsive to the fault being detected on one phase independently, two phases sequentially, or three phases simultaneously.

Claim 16 (previously presented): The computer-readable medium according to claim 10, further comprising computer-executable instructions for controlling the recloser to at least one of trip, reclose, and lockout responsive to the fault being detected on one phase independently, two phases sequentially, or three phases simultaneously.